2.4 Best Practices for

Terrain Models

BUILD a terrain model to help your Marines understand your order.

1. DRAW a rectangle on your **map** or DRAW a **CONOPS** sketch. FOCUS on the objective.

2. DRAW the same rectangle on the **dirt**. ORIENT north. SIZE the terrain model for your needs:

Small Platoon or Squad Terrain Model

Small	Table size	Platoon or Squad	10 Participants
Medium	Room size	Company	30 Participants
Large	Parking lot size	Battalion	90 Participants and walk-thru rehearsal

Medium Company Terrain Model

Large Battalion Terrain Model

3. ADD a north-seeking arrow. If using gridlines, LABEL with index cards on the edge.
   Some Marines tie white gridlines, while others avoid this practice as a tripping hazard.

   Grids allow accurate depiction of terrain, control measures, and units. If the terrain model is smaller than one grid square, consider 100-meter grids.

   CONSIDER using grid lines for terrain model construction then removing them.
   ORIENT Marines to the terrain they will encounter, not imaginary lines.

4. SHAPE the **natural terrain**: hills, valleys, vegetation, and water.
   LOCATE terrain features accurately. Exaggerate height of terrain for visibility.
   USE rocks, sticks, and vegetation to depict natural terrain.

5. ADD the **man-made terrain**: roads, bridges, buildings, and towns.
   USE taped boxes for buildings. MRE boxes work well.

6. MARK and LABEL **control measures**: boundaries, phase lines, LZs, checkpoints, and targets.

7. POSITION and LABEL **adversary** and friendly units.

Best practices

SELECT a sunny location for better visibility.

SELECT one Marine to train as the terrain model builder. A navigation Marine or CLIC Marine is ideal. By building the terrain model, that Marine becomes familiar with routes and terrain.

WRITE grids on targets and checkpoint cards so Marines can copy them during the Orientation.

FOCUS on the objective. Only include distant terrain features or control measures if they fit.
CONSIDER building two terrain models, one for the approach and one for the objective.

INCLUDE fire support coordination measures (FSCM).
INCLUDE airspace coordinating measures (ACM) only if they fit.

ORIENT so that North on the terrain model is North.

The terrain model does NOT have to be a square or rectangle but a rectangle is easier to build.

Common errors

Building an overly-small terrain model. The rule of thumb is, "the bigger, the better."

Building an overly-large terrain model with wide areas of irrelevant terrain.
FOCUS on the objective.

Briefing the Orientation and Order from a one-page operations overlay, sketch, or diagram.
A terrain model is always the best option.

Terrain model kit

A squad or platoon terrain model kit fits in a plastic bag. A company or battalion terrain model kit fits in an ammunition can.

- **Index cards.** You can pre-print and laminate cards with units and control measures, but it's easier just to make the ones you need each time.
- **Markers**.
  Sharpie markers in multiple colors.
- **String** or yarn. White for grid lines, black for roads, blue for rivers, and green, yellow, and red for phase lines and boundaries.

- **Tape**. Masking tape or clear packing tape for securing index cards and building cardboard buildings.
- **Large nails**, pegs, stakes, or skewers to anchor index cards.
- **Shovel**, trowel, or e-tool for shaping terrain.

Keep it simple. Index cards and a black marker do most of the work. Avoid hazardous spray paints. MCIP 3-10A.4 *Marine Rifle Squad*, 7 Aug 2020, lists a terrain model kit on page F-21.

Perspectives

"Orders were more often than not verbal. We issued… only four written directives."

— Lieutenant General William Slim, CG XIV Army, Burma, 1944